

DIGITALIZED SYSTEM TO BOOK AN AMBULANCE

1. Objectives:

- a. An App to book an Ambulance and take the patient safely to hospital.
- b. To make ambulances available to everyone who needs it at any time.
- c. To make the system Digitalized and as much Automated as possible.
- d. To help avail the nearest ambulance available.
- e. To make the process of picking up the patient and reaching the hospital as smooth and fast as possible through the most optimal route.
- f. To make the whole process as transparent as possible.

2. Target Platforms and availability:

Currently we are targeting android devices with version 4.0 and up. We have plans to expand it to other platforms including an online portal.

3. Features and services:

- a. Patient will have to provide a mobile number and name and press on book icon.
- b. The app will take location data along with the above provided data and search for an ambulance.
- c. The search will be optimised to find the nearest available ambulance.
- d. Once found the details and location will be shared to the driver and upon pressing find route button, the driver will be able to see the directions to the patient's location.
- e. Once the patient is picked up, the driver has to press the picked up button.
- f. The app will then search for nearby hospitals and upon finding the hospital the find route button will be activated.
- g. If pressed that will show the route to a nearby hospital.
- h. Upon reaching the patient there the driver will have to press the finish button and the driver will be ready to pick up another patient.
- i. Also, when a driver is not busy with an ongoing trip, he can press the logout button to make himself unavailable for further trips till he logs in again.
- j. A driver can register himself up by providing the name, mobile, car registration number on the first page of the app. For registered drivers the login process will be same.
- k. Upon login location data of the driver will be continuously tracked by the app and sent to the database.
- l. For the patient side, upon successful booking of an ambulance, the name, mobile number and location details of the driver will be shared with the patient. The ambulance will be live tracked and shown to the patient.

4. Future expansion of the project:

- a. The system can be brought in web portals which will allow easy access to the services.
- b. A digital payment system can be set up with an option to pay later up to a certain credit amount.
- c. A user database can also be maintained.
- d. The app can be connected to hospitals which will help in getting information about the hospital like beds available, phone number of hospital. Such information will be shared to both the driver and the patient.
- e. 2 separate booking modes can be implemented for booking. One for registered users and another for emergency. In case of emergency patients, the payment for the service may be taken through hospital.
- f. Multiple vehicle types can be introduced (AC, non-AC etc.).
- g. The system can be integrated with other services and sensors (like traffic cameras) such that an automatic call is made in case of any emergencies.
- h. The route can be shared with the police officials so that a green corridor can be created.
- i. A feature to book for another person can be implemented.

5. Implementation factors:

- a. Database will be maintained in the cloud for easy access.
- b. Separate apps for driver and patient will be made.
- c. Target OS will be android